**HONG KONG ASSOCIATION FOR BUSINESS EDUCATION**

**HONG KONG DIPLOMA OF SECONDARY EDUCATION EXAMINATION 2016/17**

**BUSINESS, ACCOUNTING AND FINANCIAL STUDIES MOCK EXAMINATION**

**PAPER 2A ACCOUNTING MODULE**

**SUGGESTED ANSWER**

Question 1

(a)

Cash Book (Bank)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2016 | | $ | 2016 | | $ | |
| | Dec 1 | Balance b/f | 5,000 | Dec 5 | Adam's Co | 7,500 | ½ |
| ½ | Dec 28 | Robert's Co | 3,000 | Dec 25 | Rent | 4,500 | ½ |
| ½ | Dec 31 | Cash | 7,000 | Dec 31 | Balance c/f | 3,000 | |
| | | | 15,000 | | | 15,000 | |

(b)

Cash Book (Bank)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2016 | | $ | 2016 | | $ | |
| | Dec 31 | Balance b/f | 3,000 | Dec 31 | Electricity | 2,920 | ½ |
| ½ | Dec 31 | Luna's Co | 4,200 | Dec 31 | Robert's Co | 3,000 | ½ |
| | | | | Dec 31 | Balance c/f | 1,280 | ½ |
| | | | 7,200 | | | 7,200 | |

(c)

Raymond Wong Ltd.
Bank Reconciliation Statement as at 31 December 2016

| | | | |
|---|---|---|---|
| | $ | $ | |
| Balance as per updated cash book | | 1,280 | ½ |
| Add: Unpresented cheque | | 4,500 | ½ |
| | | 5,780 | |
| Less: Uncredited items. | | 7,000 | ½ |
| Balance as per bank statement | | (1,220) | ½ |

**<Total: 6 marks>**

Question 2

(a)

The accounting concepts employed in the stated situations is going concern. (**1 mark**) It assumes that businesses will continue to operate in the foreseeable future and do not intend to wind up or curtail the scale of operation substantially. (**1 mark**)

(b)

The fitness equipment should value at $280,000. (**1 mark**)

The accrued rental fee should be **written** off to zero. (**1 mark**)

**<Total: 4 marks>**

Question 3

(a)

| | Chocolate | | Mango | | Vanilla | | |
|---|---|---|---|---|---|---|---|
| | $ | $ | $ | $ | $ | $ | |
| Selling price | | 90.00 | | 80.00 | | 70.00 | |
| Less: Direct labour | 20.00 | | 15.00 | | 10.00 | | |
| Direct materials | 30.00 | | 20.00 | | 15.00 | | |
| Variable cost | 10.00 | | 7.50 | | 5.00 | | |
| Variable marketing cost | 6.50 | 66.50 | 6.50 | 49.00 | 6.50 | 36.50 | |
| Contribution margin per unit | | 23.50 | | 31.00 | | 33.50 | ½@ |
| Direct labour hour per unit | | 0.4 | | 0.3 | | 0.2 | ½@ |
| Contribution per direct labour | | 58.75 | | 103.33 | | 167.50 | ½@ |
| Ranking | | 3 | | 2 | | 1 | ½@ |

(b)

| | Number of direct labour use | Number of unit produced | |
|---|---|---|---|
| Vanilla | 50,000 * 0.2 = 10,000 | 50,000 | ½ |
| Mango | 25,000*0.3 = 7,500 | 25,000 | ½ |
| Chocolate | 20,000 – 10,000 – 7,500 = 2,500 | 6,250 | 1 |

**<Total: 8marks>**

Question 4

Allowance for doubtful accounts

| | | | $ | | | $ | |
|---|---|---|---|---|---|---|---|
| | 2014 | | | 2014 | | | |
| ½ | Dec 31 | Balance c/d | 2,880 | Dec 31 | Profit and Loss ($40,000-$4,000)*8% | 2,880 | 1 |
| | 2015 | $2,880 – ($65,000 - $10,000)*5% | | 2015 | | | |
| 1½ | Dec 31 | Profit and loss | 130 | Jan 1 | Balance b/d | 2,880 | ½ |
| ½ | Dec 31 | Balance c/d | 2,750 | | | | |
| | | | 2,880 | | | 2,880 | |
| | 2016 | | | 2016 | | | |
| ½ | Dec 31 | Balance c/d | 2,950 | Jan 1 | Balance b/d | 2,750 | ½ |
| | | | | Dec 31 | Profit and loss ($30,000-$500)*10% - $2,750 | 200 | 1 |
| | | | 2,950 | | | 2,950 | |
| | 2017 | | | 2017 | | | |
| | | | | Jan 1 | Balance b/d | 2,950 | |

**<Total: 6 marks>**

Question 5

(a)

Anna and Elsa

Appropriation account for the year ended 31 December 2016

| | | | $ | |
|---|---|---|---|---|
| Net loss ($17,233 + $4,000- $1,000 - $4,150 + $3,113[#]) | | | (19,196) | 3 |
| Add: Interest on drawings: | Anna | 800 | | ½ |
| | Elsa | 375 | 1,175 | ½ |
| | | | (18,021) | |
| Balance of losses shared: | Anna (⅔) | (12,014) | | ½ |
| | Elsa (⅓) | (6,007) | (18,021) | ½ |
| | | | | (5) |

# ($16,600- $4,150)*25% = $3,113

Alternative answer:

Appropriation account

| | | $ | | $ | $ | |
|---|---|---|---|---|---|---|
| 3 | Adjusted net loss | 19,196 | Interest on drawings: | | | |
| | | | Anna | 800 | | ½ |
| | | | Elsa | 375 | 1,175 | ½ |
| | | | Share of loss: | | | |
| | | | Anna (⅔) | 12,014 | | ½ |
| | | | Elsa (⅓) | 6,007 | 18,021 | ½ |
| | | 19,196 | | | 19,196 | |
| | | | | | | (5) |

(b)

Revaluation

| | | $ | | $ | |
|---|---|---|---|---|---|
| 1 | Fittings ($5,200-$1,796)*50% | 1,702 | Vans (16,600*120% - 9,337) | 10,583 | 1 |
| ½ | Inventory | 3,000 | | | |
| ½ | Allowance for doubtful accounts | 1,750 | | | |
| ½ | Capital - Anna (⅔) | 2,754 | | | |
| ½ | - Elsa (⅓) | 1,377 | | | |
| | | 10,583 | | 10,583 | |
| ½ | Capital - Anna (3/5) | 2,071 | Fittings | 1,702 | ½ |
| ½ | - Rose (2/5) | 1,381 | Allowance for doubtful accounts | 1,750 | ½ |
| | | 3,452 | | 3,452 | |
| | | | | | (6) |

**<Total: 11 marks>**

Question 6

| Ratio | 2016 | 2015 | Comments with a reason for the changes |
|---|---|---|---|
| | | Profitability | |
| **Return on capital employed=**<br>Profit before interest and tax<br>Total Capital | ($271,280+$12,000)<br>$1,044,790<br>= 27.11%✓ | ($292,110+$15,000)<br>$1,015,110<br>= 30.25%✓ | |
| **Net Profit Margin=**<br>Net Profit<br>Sales | $271,280<br>$572,557<br>= 47.38%✓ | $292,110<br>$540,320<br>= 54.06%✓ | • There was a drop of Net Profit Margin in 2016and it might be a result of a cut of selling price or worsened cost control. ✓✓ |
| **Dividend cover(times)=**<br>Profits after tax and Preference dividends<br>Ordinary dividends paid and proposed | $271,280<br>$150,000<br>= 1.81 times ✓ | $292,110<br>$100,000<br>= 2.92 times✓ | |
| | | Liquidity | |
| **Current ratio=**<br>Current assets<br>Current liabilities | $168,990<br>$43,580<br>= 3.88:1✓ | $203,630<br>$56,690<br>= 3.59:1✓ | |
| **Liquid ratio=**<br>Liquid assets<br>Current liabilities | $116,590<br>$43,580<br>= 2.68:1✓ | $153,880<br>$56,690<br>= 2.71:1✓ | • Liquid ratio was similar as that in 2015 and it might be a result of idle resources kept or extra liquid assets provided for likely obligations.✓✓ |
| | | Asset management | |
| **Stock turnover period (days)=**<br>(Opening + closing Inventories)÷2 x365<br>Cost of sales | ($49,750+$52,400)÷2 x 365<br>$221,867<br>= 84.03 days✓ | ($55,180+$49,750)÷2x365<br>$167,470<br>= 114.35 days✓ | • The ratio was improved in 2016 and it might be a result of better inventory control. ✓✓ |
| **Average collection periods(days)=**<br>Trade receivables x 365<br>Sales | $46,540 x 365<br>$572,557<br>= 29.67 days✓ | $85,570 x 365<br>$540,320<br>= 57.80 days✓ | • The ratio was improved in 2016 and it might be a result of tightened credit control.✓✓ |
| **Total assets turnover=**<br>Sales<br>Total assets | $572,557<br>$1,109,970<br>= 0.52 times (51.58%)✓ | $545,320<br>$1,071,800<br>= 0.51 times (50.88%)✓ | |

Net profit for 2016= = $323,680 - $2,400 - $50,000 = $271,280 **✓=½ mark**

Sales for 2016= $622,557 - $50,000 = $572,557

Current assets for 2016= $221,390 - $2,400 - $50,000 = $168,990

**<Total: 12 marks>**

Question 7

(a)

54,000 units of air-conditioner is 90% capacity of the company.

100% capacity of the company = 54,000 units/90% = 60,000 units

Remaining capacity of the company = 10% (i.e. 6,000 units)

If the company accepts the special order of 6,500 units, she needs to give up the contribution margin of 500 units in the original production.

Contribution margin (in unit)

= Original selling price – Original variable cost

= Original selling price–(Direct materials + Direct labour + Variable manufacturing overheads)

= $9,750 – ($3,000 + $1,000 + $1,000)

= $4,750

Relevant costs

| | $ | | $ |
|---|---|---|---|
| Direct materials | 3,000 | ½ | **19,500,000** |
| Direct labour | 1,000 | ½ | **6,500,000** |
| Variable manufacturing overheads | 1,000 | ½ | **6,500,000** |
| Inspection cost | 100 | ½ | **650,000** |
| | 5,100 | | |
| X 6,500 units | 6,500 | | |
| | 33,150,000 | | **33,150,000** |
| Contribution margin given up due to not enough capacity (500 x $4,750) | 2,375,000 | 1 | **2,375,000** |
| Total costs of the special order | 35,525,000 | | **35,525,000** |

**Alternative answer:**

| | Accept the order | | | Not Accept the order | |
|---|---|---|---|---|---|
| | **$** | **$** | | **$** | **$** |
| Sales ($5,500 x 6,500) | | **35,750,000** | | | **0** |
| Less: Cost of goods sold | | | | | |
| Direct materials | **19,500,000** | | ½ | **0** | |
| Direct labour | **6,500,000** | | ½ | **0** | |
| Variable manufacturing overheads | **6,500,000** | | ½ | **0** | |
| Inspection cost | **650,000** | | ½ | **0** | |
| Contribution margin given up due to not enough capacity (500 x $4,750) | **2,375,000** | **35,525,000** | 1 | **0** | **0** |
| Profit | | **225,000** | | | **0** |

Stark Industries should accept the offer because the overall profit after accept this order will be increased by $225,000 ($5,500*6,500 - $35,525,000). (1)

(b)

| | | $ | | Per Unit ($) |
|---|---|---|---|---|
| Purchases price | = 54,000*$5,900 = | 318,600,000 | 1 | 5,900 |
| Ordering, receiving and inspection cost | = 54,000*$300 = | 16,200,000 | 1 | 300 |
| | | 334,800,000 | | 6,200 |
| Fixed cost remain | = 54,000*$1,500*30%= | 24,300,000 | 1 | 450 |
| Cost of purchase | | 359,100,000 | | 6,650 |
| Cost of production | = $6,500*54,000 | 351,000,000 | | 6,500 |

**Alternative answer 1:**

| **54,000 Units** | **Purchased from OEM Company** | | | **Produced by Stark Industries** | |
|---|---|---|---|---|---|
| | **$** | **$** | | **$** | **$** |
| Sales ($9,750 x 54,000) | | **526,500,000** | | | **526,500,000** |
| Less: Cost of goods sold **($6500x54,000)** | | | | | **351,000,000** |
| Purchases price | **318,600,000** | | 1 | | |
| Ordering, receiving and inspection cost | **16,200,000** | | 1 | | |
| Fixed cost remain | **24,300,000** | **359,100,000** | 1 | | |
| Profit | | **167,400,000** | | | **175,500,00** |

**Alternative answer 2:**

| **Per unit** | **Purchased from OEM Company** | | | **Produced by Stark Industries** | |
|---|---|---|---|---|---|
| | **$** | **$** | | **$** | **$** |
| Sales ($9,750 x 54,000) | | **9,750** | | | **9,750** |
| Less: Cost of goods sold | | | | | **6,500** |
| Purchases price | **5,900** | | 1 | | |
| Ordering, receiving and inspection cost | **300** | | 1 | | |
| Fixed cost remain | **450** | **6,650** | 1 | | |
| Profit | | **3,100** | | | **3,250** |

Stark Industries should produce the air-conditioner because the cost of purchase from OEM Company is higher by $8,100,000. (1)

(c)

| | | $ | |
|---|---|---|---|
| Purchases price | = 54,000*$5,900 = | 318,600,000 | |
| Ordering, receiving and inspection cost | = 54,000*$300 = | 16,200,000 | |
| | | 334,800,000 | |
| Fixed cost remain | = 54,000*$1,500*30%= | 24,300,000 | |
| | | 359,100,000 | |
| Less: Rental income | | 9,000,000 | |
| Cost of purchase | | 350,100,000 | 1 |
| Cost of production | | 351,000,000 | |

**Alternative answer:**

| | Purchased from OEM Company | | | Produced by Stark Industries | |
|---|---|---|---|---|---|
| | **$** | **$** | | **$** | **$** |
| Sales ($9,750 x 54,000) | | **526,500,000** | | | **526,500,000** |
| Less: Cost of goods sold | | | | | **351,000,000** |
| **($6500x54,000)** | | | | | |
| Purchases price | **318,600,000** | | | | |
| Ordering, receiving and inspection cost | **16,200,000** | | | | |
| Fixed cost remain | **24,300,000** | | | | |
| Rental income | **(9,000,000)** | **350,100,000** | 1 | | |
| Profit | | **176,400,000** | | | **175,500,00** |

Stark Industries should purchase the air-conditioner from OEM Company because the cost of purchases is lower by $900,000. (1)

(d)

The reputation of the selected supplier is clearly a strong influence on the decision. (1)

The reliability of the supplier in meeting the required quality standard and in making deliveries on time. (1)

After sourcing out the production, will the supplier raise the price for subsequent orders? (1)

(Any other reasonable answers are acceptable.)

**<Total: 13 marks>**

Question 8

**Cash**

| | $ | | $ |
|---|---|---|---|
| Bal b/f | 1,000 | Drawings | 12,600 |
| Trade receivable | 80,800 | Wages | 54,000 |
| | | Carriage outwards | 9,550 |
| | | General expenses | 900 |
| | | Bank | 3,750 |
| | | Bal c/f | 1,000 |
| | 81,800 | | 81,800 |

**Bank**

| | $ | | $ |
|---|---|---|---|
| Bal b/f | 26,030 | Trade payables | 411,720 |
| Cash | 3,750 | Rent and rates | 21,500 |
| Trade Receivables | 780,980 | Drawings | 246,500 |
| Equipment | 700 | General expenses | 1,350 |
| | | Carriage inwards | 10,000 |
| | | Equipment | 50,000 |
| | | Bal c/f | 70,390 |
| | 811,460 | | 811,460 |

**Trade Receivables**

| | $ | | $ |
|---|---|---|---|
| Bal b/f | 24,500 | Bank | 780,980 |
| Sales | 864,500 | Cash | 80,800 |
| | | Discounts allowed | 4,020 |
| | | Bal c/f | 23,200 |
| | 889,000 | | 889,000 |

**Trade Payables**

| | $ | | $ |
|---|---|---|---|
| Bank | 411,720 | Bal b/f | 10,800 |
| Discounts received | 3,080 | Purchases | 440,000 |
| Bal c/f | 36,000 | | |
| | 450,800 | | 450,800 |

**Disposal – Equipment**

| | $ | | $ |
|---|---|---|---|
| Equipment | 35,000 | Accumulated depreciation | 12,600 |
| | | Bank | 700 |
| | | P&L ~ loss on disposal | 21,700 |
| | 450,800 | | 450,800 |

**Trial Balance**
**As at 31 December 2015**

| | $ | $ |
|---|---|---|
| Equipment | 70,000 | |
| Fixtures | 20,000 | |
| Inventory | 42,800 | |
| Trade Receivable | 24,500 | |
| Trade Payable | | 10,800 |
| Accrued rent | | 11,750 |
| Prepaid water and electricity | 400 | |
| Accumulated depreciation – fixtures | | 4,000 |
| Accumulated depreciation - equipment | | 25,200 |
| Bank | 26,030 | |
| Cash | 1,000 | |
| Capital | | 132,980 |
| | 184,730 | 184,730 |

**Nelson Brown**
**Income Statement for the year ended 31 December2016**

| | | | $ | $ | |
|---|---|---|---|---|---|
| Sales | | | | 864,500 | ✓ |
| Less: | Cost of goods sold | | | | |
| | Opening inventory | | 42,800 | | ✓ |
| | Add: | Purchases ($13,000+$440,000) | 453,000 | | ✓✓ |
| | | | 495,800 | | |
| | Less: | Closing inventory ($495,800*3,300/14,200) | 115,221 | | ✓ |
| | | Stock Loss ($495,800*800/14,200) | 27,932 | 352,647 | ✓ |
| Gross profit | | | | 511,853 | |
| Add: | Discounts received | | | 3,080 | ✓ |
| | | | | 514,933 | |
| Less: | Wages | | 54,000 | | ✓ |
| | Carriage outwards | | 9,550 | | ✓ |
| | General expenses | | 900 | | ✓ |
| | Stock Loss ($27,932/2) | | 13,966 | | ✓ |
| | Allowance for doubtful debts ($21,200X5%+$2,000) | | 3,060 | | ✓ |
| | Discount allowed | | 4,020 | | ✓ |
| | Depreciation: Fixtures ($20,000*10%) | | 2,000 | | ✓ |
| | Depreciation: Equipment [($35,000-$7,000-$5,600)*20%+$50,000*20%] | | 14,480 | | ✓ |
| | Disposal loss | | 21,700 | | ✓ |
| | Rent ($21,500 - $11,750 + $14,000) | | 23,750 | | ✓ |
| | Water and electricity | | 1,200 | 148,626 | ✓ |
| Net profit | | | | 366,307 | |

(9)

**✓ = ½ mark**

(b)

**Nelson Brown**
**Statement of Financial Position as at 31 December 2016**

| | | | | |
|---|---|---|---|---|
| **Non-current Assets** | $ | $ | $ | |
| Fixtures at cost | | 20,000 | | ✓ |
| Less: Accumulated depreciation | | 6,000 | 14,000 | ✓ |
| Equipment at cost | | 85,000 | | ✓ |
| Less: Accumulated depreciation | | 27,080 | 57,920 | ✓ |
| | | | 71,920 | |
| **Current Assets** | | | | |
| Inventory | | 115,221 | | ✓ |
| Trade receivables | 23,200 | | | ✓ |
| Less: Allowance for doubtful debts | 3,060 | 20,140 | | ✓ |
| Prepayment and other receivables ($550+$13,966) | | 14,516 | | ✓ |
| Bank | | 70,390 | | ✓ |
| Cash | | 1,000 | | ✓ |
| | | 221,267 | | |
| **Less: Current Liabilities** | | | | |
| Trade Payables | 36,000 | | | ✓ |
| Accrued expenses and other payables ($14,000+$3,000) | 17,000 | 53,000 | 168,267 | ✓✓ |
| | | | 240,187 | |
| Representing: | | | | |
| **Capital** | | | | |
| Balance at 1 January 2016 | | | 132,980 | ✓ |
| Add: Net profit for the year | | | 366,307 | ✓ |
| | | | 499,287 | |
| Less: Drawings ($12,600+246,500) | | | 259,100 | ✓ |
| | | | 240,187 | |

(8)

(c) Subtotal: 3 marks

Item 3 – Matching ✓✓

Item 4- Going Concern✓✓

Item 5- Prudence✓✓

**✓=½ mark**

**<Total: 20 marks>**

Question 9

(a)

Master Limited
Income Statement for the year ended 31 December2016

| | $ | $ | $ | |
|---|---|---|---|---|
| Sales ($4,430,000 – $40,000) | | | 4,390,000 | ½ |
| Less: Returns inwards | | | 76,500 | ½ |
| | | | 4,313,500 | |
| Less: Cost of goods sold | | | | |
| Opening inventory | | 136,000 | | ½ |
| Add: Purchases | 3,530,000 | | | ½ |
| Less: Returns outwards | 77,800 | 3,452,200 | | ½ |
| | | 3,588,200 | | |
| Less: Inventory loss | | 119,400 | | ½ |
| Closing inventory | | 18,000 | 3,450,800 | ½ |
| Gross profit ($4,313,500*1/5) | | | 862,700 | 1 |
| Add: Other revenue | | | 600,000 | ½ |
| | | | 1,462,700 | |
| Less: Expenses | | | | |
| Administrative expenses ($178,000 + $232,000 + $183,104 + $119,400) | | 712,504 | | 1½ |
| Distribution expenses ($101,000 + ($1,477,000 * 5% - $42,000) | | 132,850 | | 1 |
| Finance costs ($142,000 + $6,000) | | 148,000 | 993,354 | 1 |
| Profit before tax | | | 469,346 | ½ |
| Taxation | | | 55,000 | ½ |
| Profit after tax | | | 414,346 | ½ |
| | | | | (10) |

(b)

Master Limited
Statement of financial position as at 31 December 2016

| | | | |
|---|---|---|---|
| ASSETS | | | |
| Non-current assets | | Net book value $ | |
| Office equipment and furniture | | 1,399,000 | ½ |
| Motor vehicles | | 732,416 | ½ |
| | | 2,131,416 | |
| Current assets | | | |
| Inventory | 18,000 | | ½ |
| Trade receivables | 1,403,150 | | ½ |
| Cash at bank | 1,626,000 | 3,047,150 | ½ |
| | | 5,178,566 | |
| EQUITY AND LIABILIIES | | | |
| 1 600 000 Ordinary shares, fully paid | | 2,400,000 | ½ |
| General reserve | | 755,000 | ½ |
| Retained profits ($600,920 + $414,346 - $50,000 - $80,000) | | 885,266 | ½ |
| | | 4,040,266 | |
| Non-current liabilities | | | |
| 8% Debentures | | 300,000 | ½ |
| Current liabilities | | | |
| Trade payables | 662,300 | | ½ |
| Accrued expenses | 6,000 | | ½ |
| Tax payable | 55,000 | | ½ |
| Subscription monies to be refunded | 75,000 | | ½ |
| Unearned revenue | 40,000 | 838,300 | ½ |
| | | 5,178,566 | |
| | | | (7) |

(c)

Realisation concept (1)

It states that revenue should only be recognized when the earning process is substantially completed (i.e. the delivery of goods) and cash or receivable is reasonably certain to be received. (1)

In this case, the goods are not yet delivered and the revenue should not be recognized. (1)

**<Total: 20 marks>**